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# INSTRUCTIONS

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## **T80-FS1 Disk Flight Simulator**

**RUNNING THE FLIGHT SIMULATOR** – Turn on your disk drives and computer system with disk out of drive. Insert the T80-FS1 disk into the drive and press the reset button. A runway and flight instruments should appear. You will then be able to fly.

**DISK VERSION IMPROVEMENTS** – A number of suggested features from FS1 cassette users as well as a few of our own new ideas are in the disk FS1. They are:

1. 30% higher projection rate.
2. Crash detection and action. Your aircraft can only withstand landing vertical velocities of about 500 ft./min. Landing in a slight bank is OK, but too much bank will cause you to scrape your wing resulting in a crash.
3. 10-frame per second precision takeoff and approach mode can be activated by pressing the '2' key and turned off by pressing '1'. This mode has only the runway, center line, and horizon (if you have it turned on). The aircraft is very responsive in this mode so be careful. Precision approach mode is automatically switched off when you touch ground when landing or when you switch to the high altitude database (raise your gear).
4. Be careful of the mountains, you may crash into them.
5. An absolute horizon line has been added. We have mixed feelings about the usefulness of this line. Sometimes it is helpful, but it often clutters the scene (on takeoff for instance). You may turn it off with the 'clear' key and turn it on with the 'enter' key. Default is 'horizon turned on'. Resetting the FS1 with the '0' key doesn't turn the horizon back on if you turned it off, so if you really dislike the horizon, clear it and forget it.
6. Key 'rollover' is improved. One user suggested an interesting flying technique: on final approach, continuously hold the 'G' key (roll center) while lightly tapping 'f' or 'h' to make small heading changes. This turned out to work very well and reminds us of the small heading corrections that are always used in actual aircraft on final approach. This method now works with left as well as right roll keys.
7. Wing dihedral effects are added. If you center the roll control while in a turn, the plane will gradually level itself. Too many FS1 pilots were using their heading indicator to fly the plane (setting a straight course by going for 000 turn rate). You can now steer the plane as you would steer a real aircraft. Use the out the window 3-D view to

get fairly straight and let the aircraft's inherent stability do the rest. If you are used to chasing a 000 turn rate, you will find that it is harder to get a 000 reading (due to the way dihedral is handled). The solution is to go for turn rates between -006 and 006 and let the plane stabilize itself. You will eventually find that it is no longer necessary to chase the 000 turn rate.

8. You aerobatic pilots will notice that it's now easy to keep FS1 flying upside down . . .
9. . . . and your heading will not be 'non-zeroable' after a lot of spins as it was in cassette FS1.
10. Fighter squadron pilots will notice that the Germans now consider dropping a bomb a declaration of war if you have not declared war yet.
11. There will be little doubt that you are shot down. Count on violent flat and longitudinal spins, crashes, and an instrument panel full of (better looking) bullet holes.
- 12-19. You may also notice: a bigger enemy fuel depot, auto-selected database switching, better '0' key reset, landing shake (based on landing severity), twice as many runway lines, and a full runway with center line on the mountain database. Finally, the turbocharger has been removed. You will no longer be able to fly your Sopwith Camel at 38000 feet!

We hope you enjoy this upgraded Disk FS1. We appreciate all the useful feedback that helped make it possible. We're always interested in hearing your comments and suggestions. As for all the yet unimplemented suggestions (multiple airports, winds, gunfire, clouds, and a hundred more) . . . just wait til you see FS2!

# sub**LOGIC**

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